Hozelock UK Garden Irrigation & Automatic Watering Systems

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UK

AQUADUE DUPLO

2-WAY DIGITAL ELECTRONIC WATER TIMER

USER MANUAL

CODE 8410

CERTIFIED QUALITY SYSTEM ISO 9001

claber®

UK

2

AQUADUE DUPLO

THANK YOU FOR CHOOSING OUR TIMER. CAREFULLY READ THIS INSTRUCTIONS MANUAL BEFORE PROGRAMMING, EACH SECTION CONTAINS ALL THE INFORMATION REQUIRED FOR THE CORRECT EXECUTION OF EACH OPERATION.

CE DECLARATION OF CONFORMITY

WE DECLARE UNDER OUR SOLE RESPONSIBILITY THAT THIS PRODUCT IS IN CONFORMITY WITH THE FOLLOWING STANDARDS OR STANDARDIZATION DOCUMENTS: EN 55022/CEI ENV 50140 TO THE PROVISIONS OF THE REGULATIONS 89/336 CEE.

CE 97

DANIELE PAPAIS

SERVICE 1	SERVICE 2	SERVICE 3

WARRANTY

THE WATER TIMER IS WARRANTED FOR A PERIOD OF ONE YEAR FROM THE DATE OF PURCHASE, THAT IS CERTIFIED BY THE INVOICE OR RECEIPT WHEN PURCHASING.

THE WARRANTY IS VOID IF THE PRODUCT HAS BEEN DAMAGED BY ACCIDENT, MISUSE OR ABUSE OR IN LACK OF THE BILL SHOWING THE PURCHASE DATE.

WRITE THE SERIE NUMBER

PLEASE TURN OVER FOR THE GENERAL CONDITIONS OF WARRANTY.

GENERAL CONDITIONS OF WARRANTY

CLABER GUARANTEES THAT ITS APPLIANCE DOES NOT PRESENT DEFECTS REGARDING THE MATERIALS EMPLOYED AND THE CONSTRUCTION. DURING THE 12-MONTH PERIOD FOLLOWING THE DATE OF DELIVERY TO THE CUSTOMER, CLABER SHALL EITHER REPLACE OR REPAIR THE DEFECTIVE PRODUCT FREE OF CHARGE IF THE APPLIANCE HAS BEEN EMPLOYED IN NORMAL WORKING CONDITIONS, IF MAINTENANCE HAS BEEN CARRIED OUT BY AUTHORIZED PERSONNEL AND IF IT HAS NOT BEEN MODIFIED IN ANY WAY. CLABER SHALL NOT BE LIABLE FOR DAMAGE DUE TO THE CUSTOMER'S MISUSE OR TO ERRORS OCCURED DURING INSTALLATION. FOLLOW THE INSTRUCTIONS AND INSTALLATION PRESCRIPTIONS REGARDING THE USE OF OUR PRODUCT.

CLABER SHALL NOT BE LIABLE FOR DAMAGE OF PRODUCTS MANUFACTURED BY OTHER COMPANIES EVEN IF COMBINED WITH THEIR APPLIANCES. THE PRODUCT CAN BE MAILED TO OUR ASSISTANCE CENTER ONLY IF THE CUSTOMER HAS BEEN AUTHORIZED TO DO SO; THE RISKS WHICH OCCUR DURING TRANSPORT ARE ENTIRELY CHARGED TO THE CUSTOMER. REFER TO THE GENERAL SALES CONDITIONS IN FORCE WHATEVER ELSE SHOULD OCCUR. FOR ANY FURTHER INFORMATION ON OUR SERVICING, YOU MAY CONTACT CLABER SPA TEL. 0434.958836 - FAX 0434.957193. P.O. BOX 159 - 33170 PORDENONE - ITALY.

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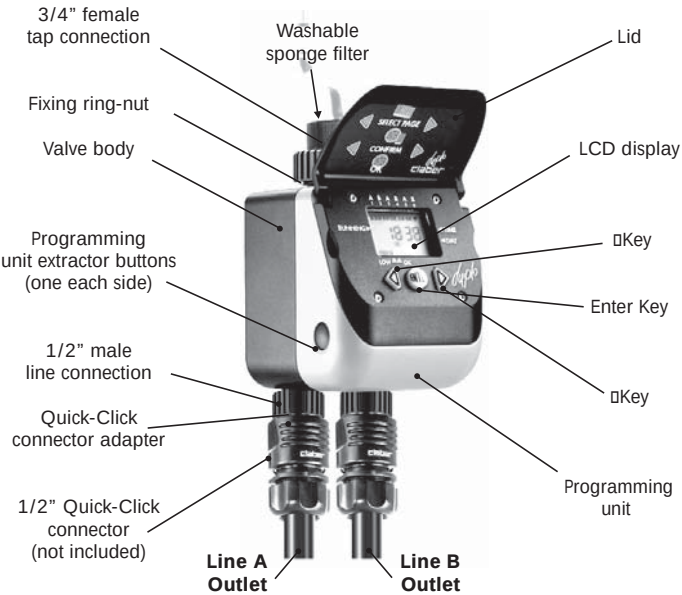
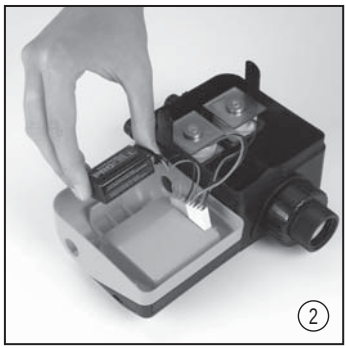


1. HOW TO FIT THE AQUADUE DUPLO TO THE TAP

• THE TAP MUST HAVE A **3/4" MALE** THREADED CONNECTION. IF NECESSARY, USE AN ADAPTER.
• UNSCREW THE RING-NUT WHICH FIXES THE TAP CONNECTION.
• HOLDING THE RING-NUT STILL WITH TWO FINGERS, SCREW THE FEMALE 3/4" CONNECTION ONTO THE TAP.
• THEN FULLY TIGHTEN THE RING-NUT TO FIX THE TIMER TO THE TAP. TIGHTEN THE RING-NUT BY HAND ONLY; DO NOT USE TOOLS (E.G. PLIERS).
• CONNECT BOTH IRRIGATION LINES TO THEIR RESPECTIVE QUICK-CLICK SYSTEM CONNECTORS
• DO NOT TURN ON THE TAP UNTIL YOU HAVE PROGRAMMED THE **DUPLO**.
• DO NOT INSTALL THE **DUPLO** INSIDE WELLS OR PITS, OR BELOW GROUND LEVEL.
• DO NOT INSTALL THE **DUPLO** INDOORS.
• DO NOT USE THE **DUPLO** WITH CHEMICALS OR LIQUIDS OTHER THAN WATER.
• DO NOT USE THE **DUPLO** WITH INLET PRESSURES ABOVE 10 BAR (140 PSI).
• CAN BE CONNECTED TO 1/2" THREADED CONNECTIONS.

2. FITTING THE BATTERY



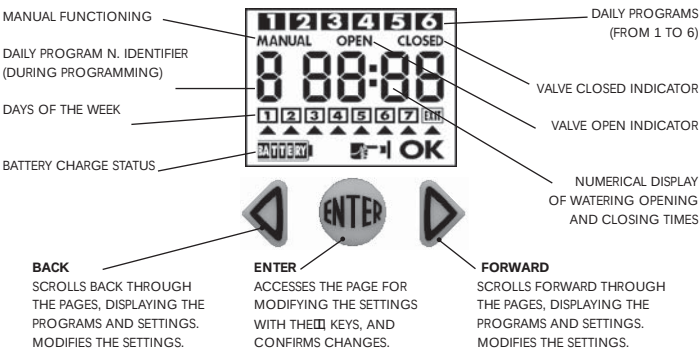
THE **DUPLO** RUNS ON A **9 VOLT ALKALINE** BATTERY, WHICH IS SUFFICIENT FOR A WHOLE WATERING SEASON (WITH AN AVERAGE OF 2 WATERING SESSIONS PER DAY). TO FIT THE BATTERY, PROCEED AS FOLLOWS:

- PRESS THE TWO BUTTONS EITHER SIDE OF THE VALVE BODY AND AT THE SAME TIME REMOVE THE PROGRAMMING UNIT BY TURNING SLIGHTLY AND LIFTING.
- CONNECT THE BATTERY TERMINAL, TAKING CARE THAT THE POLARITY IS CORRECT.
- FIT THE BATTERY IN POSITION, LYING IT IN THE SPACE PROVIDED.
- FIT THE PROGRAMMING UNIT BACK IN THE VALVE BODY, MAKING SURE IT CLICKS INTO PLACE

N.B.:

- **USE ONLY ALKALINE BATTERIES, AND REPLACE THEM AT THE START OF EACH NEW SEASON.**
- THE LCD DISPLAY SHOWS AN ICON THAT INDICATES THE BATTERY CHARGE LEVEL: WHEN THE SYMBOL IS COMPLETE BATTERY, THE BATTERY IS FULLY CHARGED. WHEN BATTERY, THE BATTERY IS FLAT.
- WHEN THE BATTERY IS FLAT, THE DUPLO AUTOMATICALLY CUTS OUT AND CLOSES BOTH THE VALVES, WHILE THE DISPLAY FLASHES.
- THE PROGRAMMING DATA ARE RETAINED DURING BATTERY REPLACEMENT; THE MAXIMUM PERMITTED REPLACEMENT TIME IS 15 MINUTES.
- IT IS IMPORTANT TO REMOVE THE BATTERY IF THE TIMER IS OUT OF USE FOR LENGTHY PERIODS.
- FLAT BATTERIES MUST BE DISPOSED OF USING THE SPECIAL DISPOSAL CONTAINERS PROVIDED.

3. THE DISPLAY AND THE KEYBOARD


MANUAL FUNCTIONING
DAILY PROGRAM N. IDENTIFIER (DURING PROGRAMMING)
DAYS OF THE WEEK
BATTERY CHARGE STATUS
1 2 3 4 5 6
MANUAL
OPEN
CLOSED
1 2 3 4 5 6 7
BATTERY
OK
ENTER
DAILY PROGRAMS (FROM 1 TO 6)
VALVE CLOSED INDICATOR
VALVE OPEN INDICATOR
NUMERICAL DISPLAY OF WATERING OPENING AND CLOSING TIMES
BACK
SCROLLS BACK THROUGH THE PAGES, DISPLAYING THE PROGRAMS AND SETTINGS. MODIFIES THE SETTINGS.
ENTER
ACCESSES THE PAGE FOR MODIFYING THE SETTINGS WITH THE KEYS, AND CONFIRMS CHANGES.
FORWARD
SCROLLS FORWARD THROUGH THE PAGES, DISPLAYING THE PROGRAMS AND SETTINGS. MODIFIES THE SETTINGS.

4. GUIDE TO INITIAL BASIC PROGRAMMING

AS SOON AS THE BATTERY IS CONNECTED, ALL THE DISPLAY SEGMENTS LIGHT UP FOR A FEW SECONDS AND THEN THE DISPLAY SHOWS THE CLOCK, INDICATING THE TIME 00:00.
THE TWO DOTS IN THE CENTRE FLASH, SHOWING THAT THE CLOCK IS OPERATING.

FIRST OF ALL, SET THE CLOCK WITH THE CURRENT TIME.
THE FIRST OPERATION TO BE CARRIED OUT ONCE THE BATTERY HAS BEEN FITTED IS SETTING THE CURRENT TIME (CLOCK).

FROM THE SITUATION IN WHICH THE DISPLAY IS SHOWING THE TIME (E.G. THE FIRST TIME THE BATTERY IS FITTED, THE TIME IS **00:00**), PRESS THE **ENTER** KEY. THE **OK** SYMBOL APPEARS IN THE BOTTOM RIGHT-HAND CORNER AND THE TWO DOTS IN THE CENTRE STOP FLASHING. USE THE **FORWARD-BACK** KEYS TO INCREASE OR DECREASE THE TIME. TO MOVE FORWARD OR BACK QUICKLY, KEEP THE **FORWARD** OR **BACK** KEY PRESSED.

AFTER SETTING THE TIME (FOR EXAMPLE, **10:42**) PRESS **ENTER**. THE **OK** SYMBOL DISAPPEARS. THE CURRENT TIME IS MEMORISED IN THE CLOCK AND THE TWO CENTRAL DOTS START FLASHING AGAIN. THE CLOCK IS NOW SET AND OPERATING.
YOU CAN NOW MOVE ON TO SETTING **WATERING CYCLES**.

WARNING: WHEN SWITCHED ON FOR THE FIRST TIME, THE TIMER DOES NOT CONTAIN ANY PROGRAMMED WATERING CYCLES.

FOR SIMPLICITY'S SAKE, WE WILL EXAMINE THE PROCEDURES FOR CARRYING OUT A **BASIC PROGRAMMING** OPERATION BY MEANS OF A REAL EXAMPLE. LET US SUPPOSE THAT WE WISH TO PROGRAM THE FOLLOWING:

A. ONE WATERING SESSION ON **LINE A**, FROM **5:00** HOURS TO **5:20** HOURS (DURATION = 20 MINUTES), **EVERY DAY** OF THE WEEK.
B. ONE WATERING SESSION ON **LINE B**, FROM **5:30** HOURS TO **6:10** HOURS (DURATION = 40 MINUTES), **EVERY DAY** OF THE WEEK.

A. LINE A PROGRAM.

THE PROCEDURE STARTS FROM THE SITUATION IN WHICH THE DISPLAY IS SHOWING THE CLOCK (E.G. **10:42**).

• PRESS THE **FORWARD** KEY ONCE. THE DISPLAY WILL SHOW:
• **1** = PROGRAM **1** (1ST LINE A WATERING SESSION).
• **OPEN** = **OPENING TIM**E
• **00:00** = WITHOUT PROGRAMMING, THE OPENING TIME IS 00:00 (SEE RIGHT)
• PRESS THE **ENTER** KEY TO MOVE ON TO SET THE **OPENING TIME** OF LINE **A**.
THE DISPLAY NOW SHOWS THE **OK** SYMBOL, INDICATING THAT THE **OPENING TIME** CAN BE SET WITH THE **FORWARD** AND **BACK** KEYS.

• USE THE **FORWARD-BACK** KEYS TO SET THE OPENING TIME AS REQUIRED (E.G. **5:00**).
THE SYMBOL OF PROGRAM **1** ALSO LIGHTS UP AT THE TOP OF THE SCREEN.
TO MOVE FORWARD OR BACK QUICKLY, KEEP THE **FORWARD** OR **BACK** KEY PRESSED.

• AFTER SETTING THE TIME (E.G. **05:00**) PRESS **ENTER**. THE **OK** SYMBOL DISAPPEARS. THE **OPENING TIME** OF LINE A HAS BEEN MEMORISED AND IS OPERATIONAL. THE SYMBOL OF PROGRAM **1** AT THE TOP OF THE SCREEN REMAINS ON.

• PRESS THE **FORWARD** KEY ONCE MORE. THE DISPLAY WILL SHOW:
• **1** = PROGRAM **1** (1ST LINE A WATERING SESSION).
• **CLOSED** = **CLOSING TIME**
• **05:01** = **DUPLO** HAS AUTOMATICALLY SET THE CLOSING TIME AT THE LOWEST POSSIBLE VALUE, I.E. 1 MINUTE AFTER THE OPENING TIME JUST SET (SEE RIGHT)

• PRESS THE **ENTER** KEY TO MOVE ON TO SET THE CLOSING TIME OF LINE **A**.
THE DISPLAY NOW SHOWS THE **OK** SYMBOL, INDICATING THAT THE **CLOSING TIME** CAN BE SET WITH THE **FORWARD** AND **BACK** KEYS.

• USE THE **FORWARD-BACK** KEYS TO SET THE CLOSING TIME AS REQUIRED (E.G. **5:20**).
TO MOVE FORWARD OR BACK QUICKLY, KEEP THE **FORWARD** OR **BACK** KEY PRESSED.

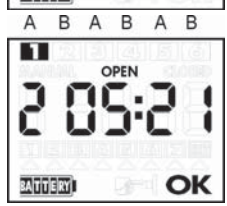
• AFTER SETTING THE TIME (E.G. **05:20**) PRESS **ENTER**. THE **OK** SYMBOL DISAPPEARS. THE **CLOSING TIME** OF LINE **A** HAS BEEN MEMORISED AND IS OPERATIONAL. THE SYMBOL OF PROGRAM **1** AT THE TOP OF THE SCREEN REMAINS ON.

YOU CAN NOW PROCEED TO PROGRAM LINE **B**.

B. LINE B PROGRAM.

PRESS THE **FORWARD** KEY ONCE MORE. THE DISPLAY WILL SHOW:
• **2** = PROGRAM **2** (1ST LINE **B** WATERING SESSION).
• **OPEN** = **OPENING TIME**
• **00:00** = WITHOUT PROGRAMMING, THE OPENING TIME IS 00:00 (SEE RIGHT).

• PRESS THE **ENTER** KEY TO MOVE ON TO SET THE OPENING TIME OF LINE **B**.
THE DISPLAY NOW SHOWS THE **OK** SYMBOL, INDICATING THAT THE **OPENING TIME** CAN BE SET WITH THE **FORWARD** AND **BACK** KEYS.
WARNING: WHAT'S MORE, THE **DUPLO** AUTOMATICALLY PRE-SETS THE MINIMUM OPENING TIME FOR LINE **B**, I.E. ONE MINUTE AFTER THE CLOSING TIME ALREADY SET FOR LINE **A**, I.E. AT **5:21** (SEE RIGHT).



• USE THE F**ORWARD-BACK** KEYS TO SET THE OPENING TIME AS REQUIRED (E.G. **5:30**). THE SYMBOL OF PROGRAM **2** ALSO LIGHTS UP AT THE TOP OF THE SCREEN.
TO MOVE FORWARD OR BACK QUICKLY, KEEP THE **FORWARD** OR **BACK** KEY PRESSED.

• AFTER SETTING THE TIME (E.G. **05:30**) PRESS **ENTER**. THE **OK** SYMBOL DISAPPEARS. THE **OPENING TIME** OF LINE **B** HAS BEEN MEMORISED AND IS OPERATIONAL. THE SYMBOL OF PROGRAM **2** AT THE TOP OF THE SCREEN REMAINS ON.

• PRESS THE **FORWARD** KEY ONCE MORE. THE DISPLAY WILL SHOW:
• **2** = PROGRAM **2** (1ST LINE B WATERING SESSION).
• **CLOSED** = **CLOSING TIME**
• **05:31** = **DUPLO** HAS AUTOMATICALLY SET THE CLOSING TIME AT THE LOWEST POSSIBLE VALUE, I.E. 1 MINUTE AFTER THE OPENING TIME JUST SET (SEE RIGHT)

• PRESS THE **ENTER** KEY TO MOVE ON TO SET THE **CLOSING TIME** OF LINE **B**.
THE DISPLAY NOW SHOWS THE **OK** SYMBOL, INDICATING THAT THE **CLOSING TIME** CAN BE SET WITH THE **FORWARD** AND **BACK** KEYS.

• USE THE **FORWARD-BACK** KEYS TO SET THE CLOSING TIME AS REQUIRED (E.G. **6:10**).
TO MOVE FORWARD OR BACK QUICKLY, KEEP THE **FORWARD** OR **BACK** KEY PRESSED.

• AFTER SETTING THE TIME (E.G. **06:10**) PRESS **ENTER**. THE **OK** SYMBOL DISAPPEARS. THE **CLOSING TIME** OF LINE **B** HAS BEEN MEMORISED AND IS OPERATIONAL. THE SYMBOL OF PROGRAM **2** AT THE TOP OF THE SCREEN REMAINS ON.

WE HAVE NOW COMPLETED THE PROGRAMMING REQUIRED. NOW USE THE **FORWARD** OR **BACK** KEYS TO RETURN TO THE DISPLAY WHICH SHOWS THE **CLOCK**.

NOW, SINCE IN OUR EXAMPLE WE INTEND TO WATER **EVERY DAY** OF THE WEEK, ON BOTH LINE **A** AND LINE **B**, IT IS NOT NECESSARY TO CARRY OUT **WEEKLY PROGRAMMING**, SINCE THE FACTORY-SET PROGRAM ALREADY PROVIDES WATERING **EVERY DAY**. OTHERWISE, MOVE ON TO THE NEXT SECTION: WEEKLY PROGRAMMING.

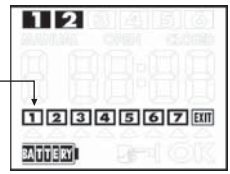
5. WEEKLY PROGRAMMING

IF WE DO NOT INTEND TO WATER EVERY DAY OF THE WEEK, WE HAVE TO CARRY OUT WEEKLY PROGRAMMING. WE CAN SET THE DAYS OF THE WEEK ON WHICH WATERING IS AND IS NOT REQUIRED. THIS PROGRAMMING APPLIES BOTH TO LINE A AND TO LINE B.

OPERATING PRINCIPLE:
AT THE END OF THE BASIC PROGRAMMING WE RETURNED TO THE DISPLAY SHOWING THE CLOCK. NOTE THAT THE 1 SYMBOL HAS ILLUMINATED ON THE DAYS OF THE WEEK.
THIS MEANS THAT THE **DUPLO** CONTINUES **TODAY** (E.G. TODAY IS SUNDAY AND WE ARE PROGRAMMING THE AQUADUE DUPLO) AS DAY **1** OF THE WEEK.
AS A CONSEQUENCE, **2** MEANS **TOMORROW** (E.G. MONDAY), **3** MEANS THE **DAY AFTER TOMORROW** (E.G. TUESDAY), ETC.

NOW LET'S LOOK AT THE **WEEKLY PROGRAMMING** PROCEDURE:
THE PROCEDURE STARTS FROM THE SITUATION IN WHICH THE DISPLAY IS SHOWING THE CLOCK (E.G. **10:42**).

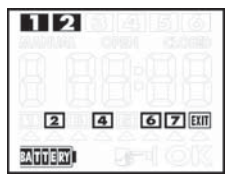
• PRESS THE **FORWARD** KEY OR THE **BACK** KEY SEVERAL TIMES UNTIL THE **WEEKLY PROGRAMMING** PAGE APPEARS (SEE RIGHT).
THE SYMBOL LINE AT THE BOTTOM SHOWS THE 7 WATERING DAYS OF THE **WEEK**, WHERE THE 1 SYMBOL MEANS **TODAY**.
AS CAN BE SEEN, ALL 7 DAYS ARE LIT UP, I.E. WATERING IS PRE-PROGRAMMED FOR **EVERY DAY**.



TO PROGRAM DAYS WITH **NO WATERING**, PROCEED AS FOLLOWS:

• PRESS THE **ENTER** KEY. THE **OK** SYMBOL APPEARS ON THE DISPLAY, INDICATING THAT YOU HAVE ACCESSED WEEKLY PROGRAMMING, WITH A **CURSOR** (▯) UNDERNEATH THE **EXIT** SYMBOL.
• NOW USE THE **FORWARD** OR **BACK** KEYS TO LOCATE THE **CURSOR** (▯) UNDERNEATH THE DAY (OR ONE OF THE DAYS) ON WHICH NO WATERING IS REQUIRED. REMEMBER THAT 1 IS TODAY (E.G. SUNDAY), 2 IS TOMORROW, 3 IS THE DAY AFTER TOMORROW, ETC.

• WHEN THE **CURSOR** ▯IS UNDERNEATH THE DAY ON WHICH NO WATERING IS REQUIRED, PRESS **ENTER** TO DELETE IT (**N.B.**: PRESSING **ENTER** AGAIN SWITCHES IT BACK ON).
• USE THE SAME PROCEDURE FOR ALL THE DAYS ON WHICH YOU DO NOT REQUIRE WATERING.
• TO CONFIRM THE WEEKLY PROGRAMMING AND EXIT, LOCATE THE CURSOR UNDERNEATH THE **EXIT** SYMBOL (ON THE RIGHT) AND PRESS **ENTER**: THE **OK** SYMBOL DISAPPEARS AND THE DISPLAY SHOWS THE WEEKLY PROGRAMMING CARRIED OUT.
EXAMPLE:
LET US IMAGINE THAT **TODAY** IS **SUNDAY** (DAY **1**) AND THAT WE ONLY WISH TO WATER ON MONDAY (DAY **2**), WEDNESDAY (DAY **4**), FRIDAY (DAY **6**) AND SATURDAY (DAY **7**); THE PROGRAMMING REQUIRED IS AS SHOWN ON THE RIGHT.



WARNING: IF **TODAY** IS NOT SUNDAY, OBVIOUSLY THE CORRESPONDENCE BETWEEN THE NUMBERS AND THE DAYS OF THE WEEK IS DIFFERENT. IN ALL CASES, REMEMBER THAT 1 IS TODAY, 2 IS TOMORROW, 3 IS THE DAY AFTER TOMORROW, ETC.
ALSO NOTE THAT THE SYMBOL FOR "TODAY" (1) ONLY APPEARS IF AT LEAST THE FIRST PROGRAM IS SET.

6. DISPLAYING THE PROGRAMS SET

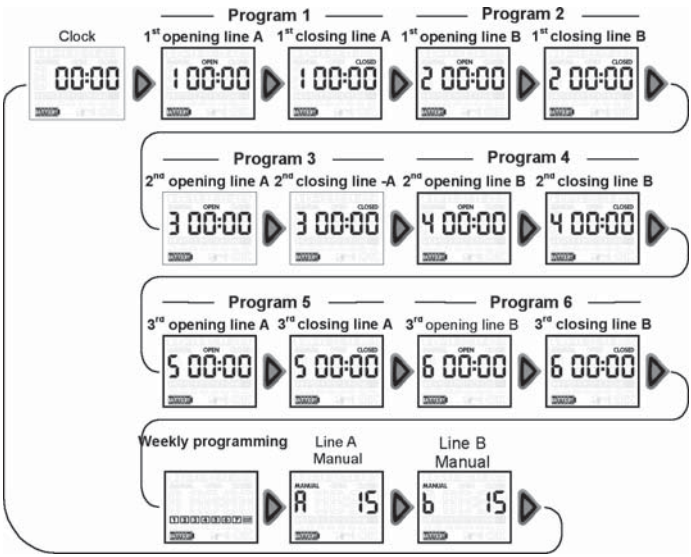
TO DISPLAY THE PROGRAMS SET, SIMPLY SCROLL THROUGH THE PAGES USING THE **FORWARD** OR **BACK** KEYS, STARTING FROM THE SITUATION IN WHICH THE DISPLAY IS SHOWING THE CLOCK.

THE NUMBERS OF THE PROGRAMS USED ARE SHOWN ON THE TOP LINE OF THE DISPLAY.
IN THE EXAMPLE DESCRIBED FOR **BASIC PROGRAMMING**, THE PROGRAMS USED ARE N. **1** AND N. **2**.

7. ADVANCED PROGRAMMING

THE **DUPLO** HAS 6 **DAILY WATERING PROGRAMS**, EACH CONSISTING OF A **WATER OPENING TIME** AND A **WATER CLOSING TIME**. THE PROGRAMS ARE NUMBERED FROM **1** TO **6**. PROGRAMS **1**, **3** AND **5** ARE FOR LINE **A**, AND PROGRAMS **2**, **4** AND **6** ARE FOR **LINE B**.
THEREFORE, FOR EACH OF THE TWO LINES THERE ARE THREE PROGRAMS PER DAY AVAILABLE, EACH WITH ONE **OPENING TIME** AND ONE **CLOSING TIME**.
THE PROGRAMMING PROCEDURE OCCUPIES A SERIES OF PAGES (SEE BELOW): FIRST THE **CLOCK**, THEN **PROGRAMS 1** TO **6** (EACH CONSISTING OF AN OPENING TIME AND A CLOSING TIME), THEN **WEEKLY PROGRAMMING**, THEN **MANUAL** ACTIVATION OF LINE A, THEN **MANUAL** ACTIVATION OF LINE B, THEN THE CLOCK AGAIN, ETC., IN ROTATION.

TO SCROLL THROUGH THE VARIOUS PAGES, USE THE **FORWARD** KEY SUCCESSIVELY (OR THE **BACK** KEY TO GO BACKWARDS). SEE EXAMPLE BELOW.



NOTE:
- THE **OPEN** SYMBOL INDICATES THE **OPENING** TIME OF A WATERING CYCLE (PROGRAM)
- THE **CLOSED** SYMBOL INDICATES THE **CLOSING** TIME OF A WATERING CYCLE (PROGRAM)

EACH PAGE HAS TWO MODES:
• **DISPLAY** ONLY
• **PROGRAMMING** (OR MODIFICATION)

AS **SECTION 6** STATES, SCROLLING THROUGH THE PAGES WITH THE **FORWARD** KEY OBTAINED DISPLAY ONLY.

TO ACCESS THE PROGRAMMING OR MODIFICATION OF A PAGE, DISPLAY THE PAGE OF YOUR CHOICE THEN PRESS **ENTER**.
THE **OK** SYMBOL APPEARS ON THE DISPLAY, INDICATING THAT THIS PAGE IS NOW IN **PROGRAMMING** MODE.

PROGRAMMING CAN NOW BE CARRIED OUT USING THE **FORWARD** AND **BACK** KEYS (E.G. TO INCREASE OR DECREASE AN OPENING OR CLOSING TIME).
ONCE PROGRAMMING IS COMPLETE, PRESS THE **ENTER** KEY AGAIN TO CONFIRM AND EXIT THE **PROGRAMMING** MODE.
THE **OK** SYMBOL GOES OUT, INDICATING THAT THE **DISPLAY** MODE IS ACTIVE AGAIN, AND THE PAGES CAN ONCE MORE BE SCROLLED USING THE **FORWARD** AND **BACK** KEYS.

THE PAGES (16 IN TOTAL) ALLOW PROGRAMMING OF:

• **CLOCK** = CURRENT TIME
• **PROGRAM 1** = **1ST** PROGRAM OF LINE A, CONSISTING OF TWO CONSECUTIVE PAGES: VALVE OPENING TIME AND VALVE CLOSING TIME.
• **PROGRAM 2** = **1ST** PROGRAM OF LINE B, CONSISTING OF TWO CONSECUTIVE PAGES: VALVE OPENING TIME AND VALVE CLOSING TIME.
• **PROGRAM 3** = **2ND** PROGRAM OF LINE A, CONSISTING OF TWO CONSECUTIVE PAGES: VALVE OPENING TIME AND VALVE CLOSING TIME.
• **PROGRAM 4** = **2ND** PROGRAM OF LINE B, CONSISTING OF TWO CONSECUTIVE PAGES: VALVE OPENING TIME AND VALVE CLOSING TIME.
• **PROGRAM 5** = **3RD** PROGRAM OF LINE A, CONSISTING OF TWO CONSECUTIVE PAGES: VALVE OPENING TIME AND VALVE CLOSING TIME.
• **PROGRAM 6** = **3RD** PROGRAM OF LINE B, CONSISTING OF TWO CONSECUTIVE PAGES: VALVE OPENING TIME AND VALVE CLOSING TIME.
• **WEEKLY PROGRAM** = DAYS OF THE WEEK ON WHICH WATERING IS AND IS NOT TO TAKE PLACE.
• **MANUAL** MODE START OF LINE **A**, FOR A PRESET TIME OF 15 MINUTES **(*)**
• **MANUAL** MODE START OF LINE **B**, FOR A PRESET TIME OF 15 MINUTES **(*)**

(*): IN MANUAL MODE, IT IS ALWAYS POSSIBLE TO CLOSE THE VALVE AT ANY TIME (SEE **SECTIONS 8** AND **9**).

PROGRAMMING OPENING AND CLOSING TIMES

THE PROCEDURE IS EXACTLY THE SAME AS THAT FOR SETTING THE CURRENT TIME (CLOCK).
IN **DISPLAY** MODE, SCROLL THROUGH THE PAGES TO THE PAGE YOU REQUIRE THEN PRESS THE ENTER KEY: THE **OK** SYMBOL APPEARS IN THE BOTTOM RIGHT-HAND CORNER. USE THE FORWARD-BACK KEYS TO INCREASE OR DECREASE THE TIME.
TO MOVE FORWARD OR BACK QUICKLY, KEEP THE **FORWARD** OR **BACK** KEY PRESSED.
AFTER SETTING THE TIME, PRESS **ENTER**. THE **OK** SYMBOL DISAPPEARS AND THE OPENING OR CLOSING TIME SET IS MEMORISED.

N.B.:
• FOR BOTH LINES **A** AND **B**, IT IS ESSENTIAL TO START FROM THE 1ST PROGRAM AVAILABLE (E.G. PROGRAM **1** FOR LINE **A** AND PROGRAM **2** FOR LINE **B**).
• THE OPENING AND CLOSING TIMES FOR THE PROGRAMS WHICH FOLLOW MUST BE LATER IN ORDER OF TIME. IN OTHER WORDS, ONCE THE OPENING AND CLOSING TIMES FOR THE 1ST PROGRAM HAVE BEEN SET (E.G. WATERING FROM 02:30 TO 03:15) THE **OPENING** TIME FOR THE 2ND PROGRAM MUST BE AT LEAST ONE MINUTE AFTER THE CLOSING TIME OF THE 1ST PROGRAM (THEREFORE: AT LEAST 3:16). IN OTHER WORDS, TIME OVERLAPS BETWEEN PROGRAMS ARE NOT POSSIBLE.
• SIMILARLY, THE **CLOSING TIME** OF ANY ONE PROGRAM MUST BE AT LEAST **ONE MINUTE** AFTER THE **OPENING TIME** OF THE SAME PROGRAM.

8. OPENING AND CLOSING LINE A IN MANUAL MODE

THE PROCEDURE STARTS FROM THE SITUATION IN WHICH THE DISPLAY IS SHOWING THE TIME (E.G. **10:42**).
• PRESS THE **FORWARD** (▯) KEY OR THE **BACK** (▯) UNTIL THE "**MANUAL** LINE **A**" PAGE (SEE RIGHT) APPEARS. AS THE SCREEN SHOWS, THE MANUAL OPENING TIME CANNOT BE CHANGED, AND IS SET AT **15 MINUTES**.
• PRESS THE **ENTER** KEY: THE **OK** SYMBOL AND THE CLOSED SYMBOL LIGHT UP
• NOW, TO OPEN LINE A PRESS THE **BACK** (▯) KEY AND TO CLOSE IT PRESS THE **FORWARD** (▯) KEY. UNLESS THE LINE IS CLOSED IN MANUAL MODE, IT WILL CLOSE AUTOMATICALLY AFTER 1**5 MINUTES**.
N.B.: IT IS NOT POSSIBLE TO EXIT THE "**MANUAL** LINE **A**" PAGE AS LONG AS THE VALVE IS OPEN.

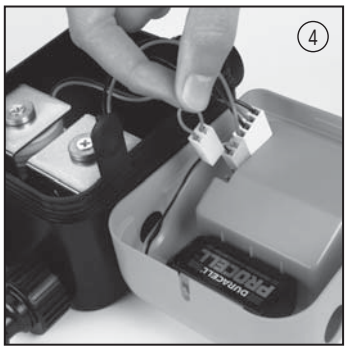
9. TURNING LINE B ON AND OFF IN MANUAL MODE

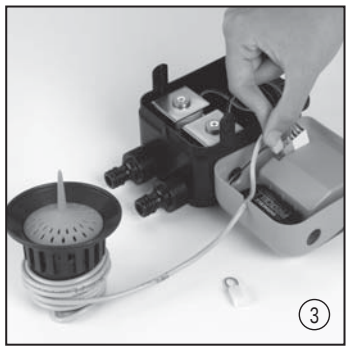
PROCEED AS FOR LINE **A** BUT USING THE "**MANUAL** LINE **B**" PAGE, WHICH FOLLOWS THE LINE **A** PAGE.
SEE RIGHT.

10. DELETING PROGRAMS

TO DELETE ANY PROGRAM SET, PROCEED AS FOLLOWS:
• USING THE **FORWARD** OR **BACK** KEYS, DISPLAY THE "**CLOSED**" PAGE OF THE PROGRAM YOU WISH TO DELETE, I.E. THE ONE SHOWING THE CLOSING TIME.
• PRESS **ENTER**, AS TO ACCESS THE PROGRAMMING MODE.
• PRESS THE **FORWARD** AND **BACK** KEYS **SIMULTANEOUSLY**: THE **DUPLO** GIVES A LONG BEEP AND THE PROGRAM IS CLEARED.

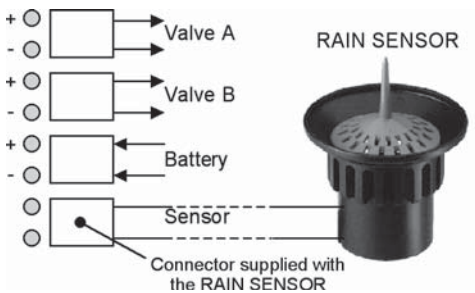
11. CONNECTING TO A RAIN SENSOR





THE **DUPLO** CAN BE CONNECTED TO A **RAIN SENSOR** (CLABER CODE 90915). THE RAIN SENSOR CUTS OFF THE DUPLO WATERING PROGRAM IN CASE OF RAIN, RESTORING IT AUTOMATICALLY WHEN THERE IS NO MORE WATER LEFT IN THE SENSOR.

THE **RAIN SENSOR** MUST BE CONNECTED TO THE TWO SPECIAL ELECTRICAL CONTACTS PROVIDE INSIDE THE **DUPLO** PROGRAMMING MODULE, USING THE CONNECTOR SUPPLIED WITH THE SENSOR. THE TWO-WIRE CABLE MUST BE FED IN THROUGH THE SEAT PROVIDED IN THE BOTTOM OF THE **DUPLO**. BEFORE FITTING THE CONNECTOR, REMOVE THE JUMPER PLACED OVER THE TWO CONTACTS. FOR THE CONNECTION DIAGRAM, SEE RIGHT.



12. RECOMMENDATIONS FOR USE

• FOR SAFETY, CHECK THAT THE PROGRAM(S) IS/ARE CARRIED OUT CORRECTLY WHEN THE **DUPLO** IS PUT INTO OPERATION FOR THE FIRST TIME.
• TRY TO AVOID SHARP JERKS ON THE PIPES AND FITTINGS CONNECTED TO THE **DUPLO**.
• PROTECT THE **DUPLO** FROM FROST.
• KEEP THE PANEL LID CLOSED WHEN NOT PROGRAMMING.
• WASH THE SPONGE FILTER IN RUNNING WATER REGULARLY. TO REMOVE IT, TURN OFF THE TAP AND DISCONNECT THE **DUPLO** BY UNDOING THE RING-NUT. THEN COMPLETELY REMOVE THE RING-NUT AND THE FEMALE 3/4" CONNECTION AND EXTRACT THE FILTER. AFTER WASHING, REASSEMBLE ALL PARTS.
• WHEN THE DEVICE IS OUT OF USE FOR LENGTHY PERIODS, REMOVE THE BATTERY AND PLACE THE PROGRAMMER IN A DRY PLACE WHERE THE TEMPERATURE DOES NOT DROP BELOW 5°C.

13. TECHNICAL FEATURES

• 2 LINES (A AND B) WITH BISTABLE SOLENOID VALVES
• WATERTIGHT PROGRAMMING MODULE, SEPARABLE FROM THE VALVES.
• CLOCK
• 3 KEYS (BACK, FORWARD AND ENTER) AND LCD DISPLAY WITH ICONS
• 6 PROGRAMS PER DAY (3 ON LINE A AND 3 ON LINE B)
• WATERING TIMES FROM 1 MINUTE TO 23 HOURS AND 59 MINUTES
• WEEKLY PROGRAMMING
• MANUAL FUNCTION (IMMEDIATE START)
• RAIN SENSOR INPUT
• FOR PRESSURES FROM 0.5 TO 10 BAR
• FEMALE 3/4" TAP CONNECTION WITH WASHABLE FILTER
• QUICK-CLICK SYSTEM LINE CONNECTORS

BAR	0.5	1.0	2.0	2.5	3.0	4.0	5.0
L/MIN.	11	16	22	25	27	31	35

THIS PRODUCT COMPLIES WITH THE EN 55022 / CEI ENV 501 40 STANDARDS, IN LINE WITH THE REQUIREMENTS OF CEE DIRECTIVE 89/336.